



TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 1 of 8

TANCHOR CHANNELS CO., LTD.

3F, BUILDING 3, NO.1221, YAN-AN XI RD., SHANGHAI

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name : TANCHOR CAST-IN CHANNEL
Sample Number : SHCCM150501308
Test Required : Please see the next page(s)
Test Method : Please see the next page(s)
Product specification : HBC40/25
Product or Lot No. : cold formed
Manufacturer : Tanchor Channels Co., Ltd.
Material and Mark : stainless steel 316
Date of Receipt : May. 07, 2015
Test Period : May. 07, 2015 to May. 18, 2015
Test result(s) : For further details, please refer to the following page(s)

***** To be continued*****

Signed for SGS-CSTC Standards
Technical Services (Shanghai) Co., Ltd.

Tiffany Liu
Authorized signatory



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China. 201319 t(86-21) 61196300 f(86-21) 61191853/68183920 www.sgsgroup.com.cn
中国·上海·浦东康桥东路1159弄69号 邮编: 201319 t(86-21) 61196300 f(86-21) 61191853/68183920 e sgs.china@sgs.com

TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 2 of 8

Sample Specification: 300mmx40mmx60mm (Length x Width x Anchor Length)

1. Brief Introduction:

Tanchor Channels Co., Ltd consigns SGS-CSTC Standard Technical Services (Shanghai) Co., Ltd. to test the tensile loading of Tanchor Cast-in Channel. The embedment of the sample and the mold of the concrete (strength grade C30) are done by consigner.

2. Concrete strength test

Test method: With reference to ATSM C39/C39M-14a Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

Test result:

Sample No.	Test result (MPa)	Average strength (MPa)
1	56.6	55.9
2	54.1	
3	56.9	
Remark	Sample dimensions: 100mm×100mm×100mm	

Note: The mold of the concrete (strength grade C30) was done by the client; the age of sample was 31 days.



Sample photo

***** To be continued *****

TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 3 of 8

3. Tension test of the tanchor cast-in channel

Test Method:

With reference to BS 5080-1:1993(R2008) Structural fixings in concrete and masonry-Part 1: Method of test for tensile loading

Sample No.	Design Load (kN)	Acceptable Load of Failure (kN)	Safety Factor	Test result		
				Maximum Test Load (kN)	Failure mode	Conclusion
1	16	48	3	82.1	Sample and concrete are broken	Meet the design requirements.
2				87.3	Sample and concrete are broken	Meet the design requirements.
3				83.7	Sample and concrete are broken	Meet the design requirements.

Note: The design load and safety factor are declared by client.

Test Equipments

No.	Equipment	Type
1	Bolt pull test apparatus	ZY-30
2	Dial indicator	0~10mm

Annex A: Test results of each sample

Annex B: Sample drawing and photo

Annex C: Test photos

***** To be continued*****



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China. 201319 t(86-21) 61196300 f(86-21) 61191853/68183920 www.sgs.com.cn
中国·上海·浦东康桥东路1159弄69号 邮编: 201319 t(86-21) 61196300 f(86-21) 61191853/68183920 e sgs.china@sgs.com

TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 4 of 8

Annex A Test results of each sample

Table 1: Test results of Sample No.1

No.	Load (kN)	Deflection (mm)		Average Deflection (mm)
		1	2	
1	0	0	0	0
2	5	0.01	0	0
3	10	0.06	0.04	0.05
4	15	0.18	0.16	0.17
5	20	0.50	0.43	0.46
6	25	0.83	0.68	0.76
7	30	1.13	0.94	1.04
8	35	1.35	1.22	1.28
9	40	1.67	1.55	1.61
10	45	1.96	2.03	2.00
11	50	2.29	2.60	2.44

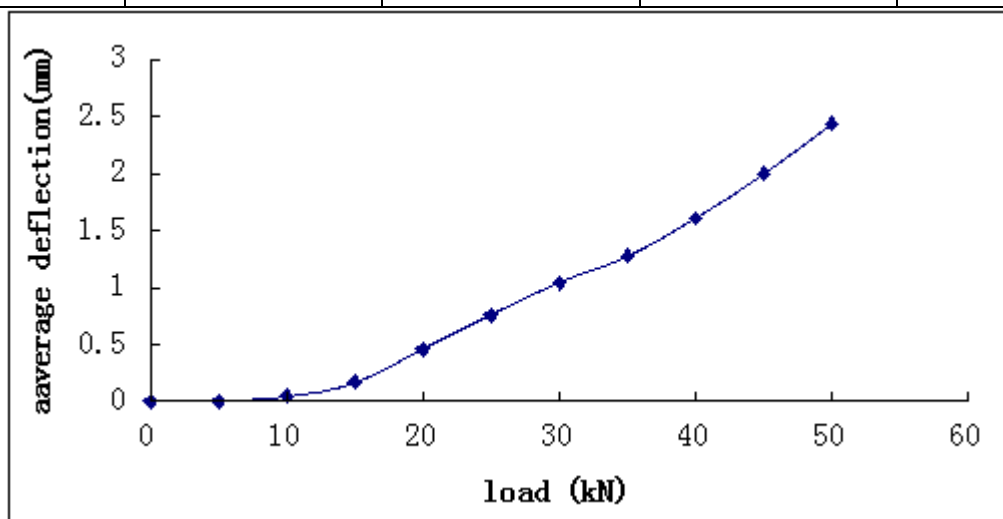


Fig.1: Average Deflection-Load Graph of Sample No.1

***** To be continued*****

TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 5 of 8

Table 2: Test results of Sample No.2

No.	Load (kN)	Deflection (mm)		Average Deflection (mm)
		1	2	
1	0	0	0	0
2	5	0.03	0.02	0.02
3	10	0.05	0.02	0.04
4	15	0.06	0.02	0.04
5	20	0.14	0.12	0.13
6	25	0.28	0.40	0.34
7	30	0.48	0.63	0.56
8	35	0.68	0.86	0.77
9	40	0.91	1.11	1.01
10	45	1.24	1.44	1.34
11	50	1.67	1.87	1.77

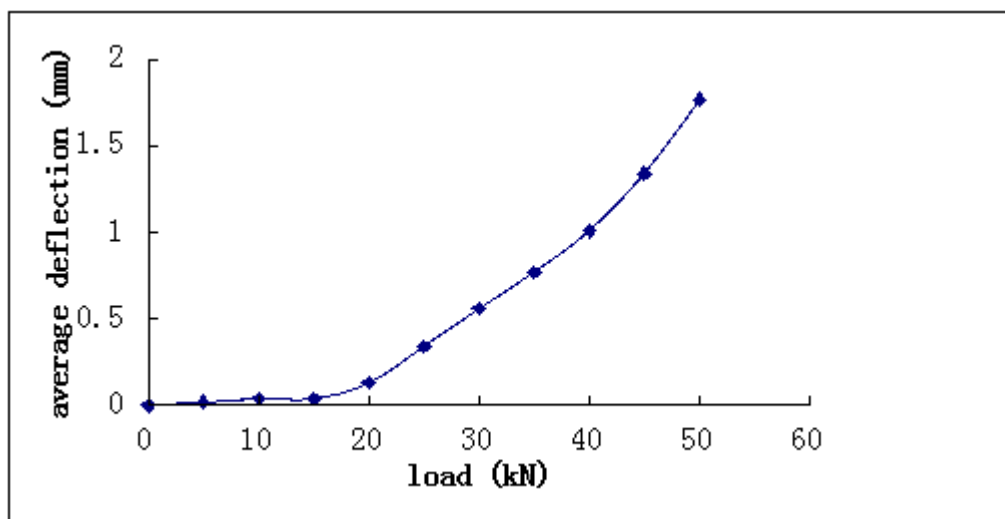


Fig.2: Average Deflection-Load Graph of Sample No.2

***** To be continued*****

TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 6 of 8

Table 3: Test results of Sample No.3

No.	Load (kN)	Deflection (mm)		Average Deflection (mm)
		1	2	
1	0	0	0	0
2	5	-0.12	0.02	-0.05
3	10	-0.04	0.04	0
4	15	0.01	0.05	0.03
5	20	0.04	0.06	0.05
6	25	0.18	0.20	0.19
7	30	0.50	0.43	0.46
8	35	0.88	0.81	0.84
9	40	1.37	1.31	1.34
10	45	1.74	1.70	1.72
11	50	2.27	2.25	2.26

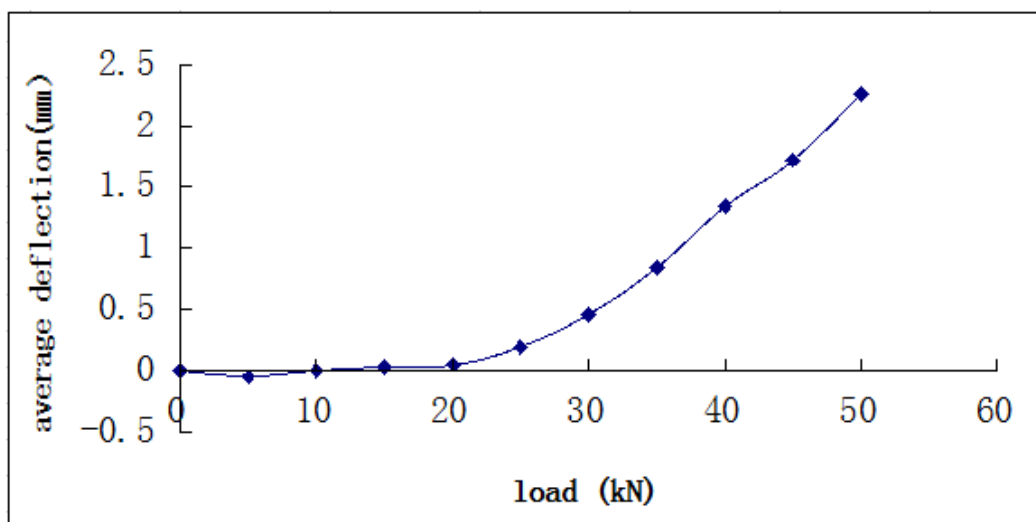


Fig.3: Average Deflection-Load Graph of Sample No.3

Statement: Unless otherwise stated the result shown in this test report refer only to the sample(s) tested.

***** To be continued*****



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China. 201319 t(86-21) 61196300 f(86-21) 61191853/68183920 www.sgschina.com.cn
中国·上海·浦东康桥东路1159弄69号 邮编: 201319 t(86-21) 61196300 f(86-21) 61191853/68183920 e sgs.china@sgs.com

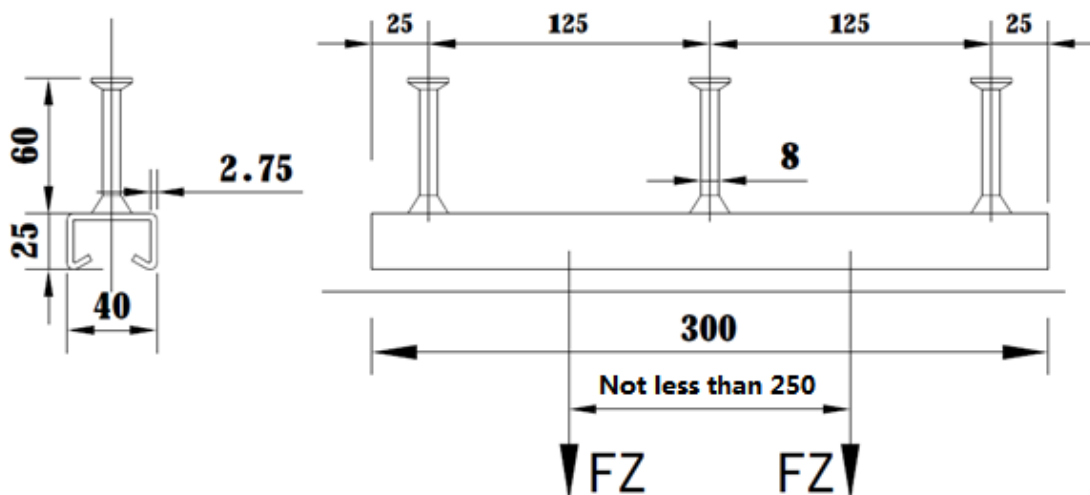
TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 7 of 8

Annex B: Sample drawing and photo



Sample photo

***** To be continued*****

TEST REPORT

No. : SHCCM150501308

Date : May. 22, 2015

Page: 8 of 8

Annex C Test photos



Before test



The sample No.1 After test



The sample No.2 After test



The sample No.3 After test

***** End of report *****